

# Biodeterioration Abstracts

Volume 1



Prepared by

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# Biodeterioration Abstracts

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# BIODETERIORATION ABSTRACTS

## READERS' GUIDE

*Biodeterioration Abstracts* matches in content and design the abstracts section of *International Biodeterioration*, which was published by CAB International over the period 1984–1986. It is compiled from the CAB ABSTRACTS database, and will include occasional review articles on topics of importance.

The primary object of *Biodeterioration Abstracts* is to provide a quarterly survey of the more important recent world literature on biodeterioration of materials, artefacts or facilities of economic importance (including foodstuffs, timber, fuels, construction materials, etc.) by living organisms (including microorganisms, insects, rodents, higher plants, etc.) and on biodegradation of waste materials to less objectionable, more easily disposable or higher-value products by living organisms.

Serial publications, including other abstracting journals, together with miscellaneous publications and books are scanned. An effort is made to note all new data; previously published information, well known facts and popular articles may be omitted. Some background papers are given very brief notices, and some of local or marginal interest are cited by titles only.

When consulting an entry the reader should remember that the title is an integral part of the abstract and may include data necessary for its full comprehension.

In a typical citation the name(s) of the author(s) are followed by the title of the paper in English. If the paper is written in a language other than English, the English translation of the title is enclosed in square brackets. The title in the original language, if not English, follows, except for Arabic, Chinese, Japanese or languages in the Cyrillic script, etc. Journal titles are next given in unabbreviated form. The year of issue, in round brackets, the volume number, part number in round brackets, and first and last page numbers of the article complete the basic citation.

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The abstracts are arranged in a repeating series based on subject content, as indicated by page and section headings. The quarterly contents list follows the same pattern.

An author and subject index are provided.

The CAB ABSTRACTS database from which this journal is compiled consists of some 2 million records on agricultural and related literature. Online access to the database is available from a number of host organizations including CAB International (UK), BRS Information Technologies (USA), CAN/OLE (Canada), DIALOG Information Services (USA, Europe, Far East, Australasia), DIMDI (FRG), ESA-IRS (Europe), and JICST (Japan).

For details of the whole range of CABI products and services see the back cover.





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CABI's organizational structure comprises the Review Conference of member governments, which meets every five years; the Executive Council, with one representative from each member government, which meets four times per year; and the Directorate, including CABI Headquarters and its 14 Institutes and Bureaux. The Director General is the chief executive, controlling the 375 staff, two thirds of whom are at managerial or professional level, through three Directors, for Information, Scientific and Administrative Services.

The organization exists to provide information, scientific and development services for agriculture and allied disciplines throughout the world.

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The chief function of the Information Services is to provide ready access to published information on research in agriculture and allied disciplines, including rural development.

Over 100 scientists/linguists at CABI's Bureaux and Institutes scan the world literature, select the significant items, and prepare an informative abstract of each which is entered into the CAB ABSTRACTS database. With some 2 million records in the database since 1973, and 3 million more in printed journals back to 1930, the total archive provides a unique encyclopaedic resource of unsurpassed reliability and quality.

The CAB ABSTRACTS database is publicly accessible online from major international online vendors and from CABI. It is used to provide current awareness and retrospective information services in hard copy and machine-readable form. Chief among these are 46 printed abstract journals, which are taken by 10,000 subscribing organizations worldwide. New journals are started in response to changing users' needs or if sponsors guarantee the circulation. Users needing more specific information may select outputs that match their particular requirements, helped if necessary by CABI's subject experts; outputs are supplied as magnetic tape, computer printout, microfiche or floppy disk. The database is also available on optical disk (CD-ROM), a new technology ideally suited to developing countries. To complete the service, photocopies of original articles are provided on request through the CABI Library Services.

Text processing, database production and data retrieval are provided by CABI's in-house computer centre, which also offers these services to other organizations. The centre is already recognized as the focal point for online access to a portfolio of small bibliographic databases and databanks relevant to agriculture, medicine and development.

Other functions of the Information Services include compilation of specialized databanks and directories, publication of primary journals, authoritative reviews and books, and training in information transfer for librarians, documentalists and information specialists.

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The Scientific Services of CABI are provided by four Institutes. Three deal with the science of taxonomy and provide identification and related services; the fourth deals with biological control.

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CIE provides an identification service for insects, mites and other arthropods, especially species that are of actual or potential importance as pests, parasitoids, predators and pollinators or are otherwise relevant to agriculture, forestry or related subjects. Contract research is also undertaken in these fields. The Institute's taxonomists work in the British Museum (Natural History) where they have access to the Museum's 23 million reference specimens of insects and mites, an incomparable aid to authoritative identifications and research on arthropod classification.

#### CAB International Mycological Institute (CMI)

CMI is the largest centre for systematic mycology in the world and provides a service for the identification of filamentous fungi and plant-pathogenic bacteria. It has about 300,000 dried reference specimens, a culture collection of more than 12,500 isolates, an extensive library, a Biodeterioration and Industrial Services Laboratory, a Biochemical Laboratory, and a Plant Pathology Liaison Unit. The Institute provides a wide range of consultancy and contract services for plant pathologists and industry. It incorporates the UK National Collection of Fungus Cultures and the Biodeterioration Centre.

## **CAB International Institute of Parasitology (CIP)**

CIP provides an identification service for plant-parasitic and entomophilic nematodes, and helminth parasites of animals and man. The reference collections contain over 65,000 specimens, and an extensive specialist library is maintained. The Tropical Plant Nematology Advisory and Research Unit provides practical advice on plant-parasitic nematodes and their control worldwide, and the Institute also houses the WHO Filarial Reference Collection.

## **CAB International Institute of Biological Control (CIBC)**

CIBC provides information and advice on biological control, undertakes research and implementation of programmes on biological control of major pests and weeds, and participates in integrated pest management programmes in association with other agencies. It has its headquarters in the UK but operates also from stations at Delémont, Switzerland; Bangalore, India; Rawalpindi, Pakistan; Nairobi, Kenya; and Curepe, Trinidad, West Indies.

All four Institutes carry out research, and offer a wide range of training activities from postgraduate studentships to special training courses both in the UK and abroad.

## **DEVELOPMENT SERVICES**

**The Development Services provide a focus for CABI consulting activities.**

The Development Services Group was established in 1986 to provide a sharper focus for CABI's consulting activities. It draws heavily on the unique scientific expertise and information resources available in the CABI Institutes and Bureaux, and its activities are backed by nearly sixty years of CABI involvement in science and world agriculture.

The Development Services offer practical advice and assistance on many pest-related or environmental problems in agriculture. Specific services include:

- project appraisal
- advice in a range of scientific disciplines
- research supervision
- research evaluation
- project implementation.

These services are offered in situations ranging from short-term individual consultancies to project components and major development projects. The current focus is on:

- integrated pest management programmes
- national crop protection services
- pest/disease identification and control
- crop-orientated pest and disease surveys.

One component of these activities that can be extended to any branch of agriculture or development is the provision of a comprehensive information service, involving expert review and analysis of all relevant literature.



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